UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,469	11/26/2003	John P. Karidis	ARC920030084US1	7647

7590 06/18/2007

Frederick W. Gibb, III
McGinn & Gibb, PLLC
Suite 304
2568-A Riva Road
Annapolis, MD 21401

EXAMINER	
GEBRESILASSIE, KIBROM K	

ART UNIT	PAPER NUMBER
2128	

MAIL DATE	DELIVERY MODE
06/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/723,469	KARIDIS ET AL.	
	Examiner	Art Unit	
	Kibrom K. Gebresilassie	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 03 April 2007.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-22 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 03 April 2007 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to amended application filed on April 03, 2007.

2. Claims 1-22 are pending.

Response to Arguments

3. Response to Objection to the Drawings: In previous office action mailed on January 04, 2007, Examiner indicated that Fig. 1 to 2(P) to be labeled as "Prior Art". Applicants are amended the drawings to include "Prior Art" with Figures 1 to 2(P) and therefore the objection is withdrawn.

4. Response to 101 rejection: Applicant's argument, see Remarks page 9, filed January 04, 2007, with respect to claims have been fully considered and are persuasive. The rejection of 101 has been withdrawn.

5. Response to Prior Art Rejection: Applicant's arguments, see Remarks pages 10-18 , filed January 04, 2007, with respect to the rejection(s) of claim(s) 1-22 under 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Publication No. 2004/0140956 A1 issued to Kushler et al.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Publication No. 2004/0140956 A1 issued to Kushler et al.

As per Claim 1:

Kushler discloses a method of relaxing typing accuracy on a computer keyboard comprising alphanumeric keys and a spacebar key, said method comprising:

recording a coordinate of a landing point corresponding to a sequence of tapped keys on said computer keyboard (**See: [0029]**);

counting a total number of landing points tapped only after verification that said spacebar key has been tapped during said sequence (**See: [0027]**);

comparing a geometric pattern formed by an inputted sequence of said landing points to a pattern formed by lexical entry of sequences, wherein said lexical entry of sequences comprises a subset of sequences comprising sequences having an amount of letters equaling said total number (**See: [0029], [0044]**);

calculating a distance between said geometric pattern and the pattern formed by letters corresponding to said lexical entry of sequences (**See: [0057]**); and

determining a word by selecting a shortest distance between said inputted sequence of said landing points and letters corresponding to said lexical entry of sequences (**See: [0048]**); and

using the determined word to check a correct spelling of a tapped word entry corresponding to said inputted sequence of said landing points (**See: [0049]**).

As per Claim 2:

Kushler discloses the method of claim 1, wherein said distance is a mean distance of all inputted sequence of points (**See: [0042]**).

As per Claim 3:

Kushler discloses the method of claim 1, wherein said distance is an elastic matching distance between said inputted sequence of points and said lexical entry of sequences (such as ***...dynamic programming...***; **See: [0048]**).

As per Claim 4:

Kushler discloses the method of claim 3, further comprising normalizing said elastic matching distance by an amount of letters in said word (**See: [0046]**).

As per Claim 5:

Kushler discloses the method of claim 1, further comprising comparing said shortest total distance to a predetermined threshold distance (**See: [0064]**).

As per Claim 6:

Kushler discloses the method of claim 5, further comprising outputting said word if said shortest total distance is smaller than said predetermined threshold distance (**See: [0035]**).

As per Claim 7:

Kushler discloses the method of claim 5, further comprising outputting letters tapped if said shortest total distance is greater than said predetermined threshold distance (**See: [0035]**).

As per claim 8:

Kushler discloses a method of relaxing typing accuracy on a computer keyboard comprising alphanumeric keys and a spacebar key, said method comprising:

recording a coordinate of at least one keystroke landing point, wherein said keystroke emanates from tapping a key on a keyboard (**See: [0029]**);

counting a total amount of tapped landing points only after verification that said spacebar key has been tapped during an inputted sequence of tapped landing points (**See: [0027]**);

creating a set of words from a lexicon having a same number of said tapped landing points (**See: [0040], [0041]**);

for each letter in each word in said set, computing a distance from said coordinate to a central position of said key corresponding to said letter (**See: [0063]**);

summing a total distance for each word (**See: [0042]**); and

selecting a word from said set having a shortest total distance to said coordinate (**See: [0048]**); and

using the selected word to check a correct spelling of a tapped word entry corresponding to said inputted sequence of tapped landing points (**See: [0049]**).

As per Claim 9:

Kushler discloses the method of claim 8, wherein said distance is a mean distance of all said

tapped landing points for each word (**See: [0042]**).

As per Claim 10:

Kushler discloses the method of claim 8, wherein said distance is an elastic matching distance between said tapped landing points and said coordinate (such as ***...dynamic programming...***; **See: [0048]**).

As per claims 11-22:

The limitations of claims 11-22 have already been discussed in the rejection of claims 1-7. The instant claims is/are functionally equivalent to the above rejected claims and is/are therefore rejected under the same rationale.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,677,932 issued to Westerman et al teaches:

(57) ABSTRACT

A system is disclosed for recognizing typing from typing transducers that provide the typist with only limited tactile feedback of key position. The system includes a typing decoder sensitive to the geometric pattern of a keystroke sequence as well as the distance between individual finger touches and nearby keys. The typing decoder hypothesizes plausible key sequences and compares their geometric pattern to the geometric pattern of corresponding finger touches. It may also hypothesize home row key locations for touches caused by hands resting on or near home row. The resulting pattern match metrics may be combined with character sequence transition probabilities from a spelling model. The typing decoder then chooses the hypothesis sequence with the best cumulative match metric and sends it as key codes or commands to a host computing device.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communications

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kibrom K. Gebresilassie whose telephone number is 571-272-8571. The examiner can normally be reached on 8:00 am - 4:30 pm Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KG

HUGH JONES Ph.D.
PRIMARY PATENT EXAMINER
TECHNOLOGY CENTER 2100